CLAIMS

1.   A method comprising:

decoding an enhancement layer bitstream from encoded video data, the encoded video data having a base layer and one or more enhancement layers, the video data having been encoded according to a high HQRB (high quality reference bit-rate);

determining data throughput characteristics of a network coupled to a client computing device;

calculating a new HQRB based on the data throughput characteristics; and

encoding the enhancement layer bitstream based on the new HQRB to generate a transcoded enhancement layer for streaming to the client computing device; and

wherein the base layer is not decoded for streaming to the client computing device.

2.   A method as recited in claim 1, wherein the encoding substantially optimizes transcoded enhancement layer for streaming with the base layer across the network to the client computing device as compared to streaming of the encoded video data.

3.   A method as recited in claim 1, wherein the encoded video data is encoded using progressive fine-granularity scalable (PFGS), MA-FGS, or RFGS encoding criteria.

4.   A method as recited in claim 1, wherein the data throughput characteristics indicate a relatively low data throughput, and wherein calculating the new HRQB further comprises:

responsive to identifying the relatively low data throughput, selecting the new HRQB to be lower than the high HRQB.

5.   A method as recited in claim 1, wherein the data throughput characteristics indicate a relatively high data throughput, and wherein calculating the new HRQB further comprises:

responsive to identifying the relatively high data throughput, selecting the new HRQB to be the same or higher than the high HRQB.

6.   A method as recited in claim 1, wherein the encoding further comprises determining motion vector(s) from the base layer without decoding an entirety of a bitstream corresponding to the base-layer.

7.   A method as recited in claim 1, wherein the method further comprises streaming the transcoded enhancement layer and the base layer across the network to the client computing device.

8.   A method as recited in claim 1, wherein the method further comprises encoding video data to generate the one or more enhancement layers and the base layer.

9.   A method as recited in claim 1, wherein the method further comprises determining networking and/or video presentation capabilities of the client computing device, and wherein calculating the new HQRB further comprises formulating the new HQRB based on one or more of the networking and/or video presentation capabilities.

10.   A computer-readable medium comprising computer-executable instructions for:

decoding an enhancement layer bitstream from encoded video data, the encoded video data having a base layer and one or more enhancement layers, the video data having been encoded according to a high HQRB (high quality reference bit-rate);

determining data throughput characteristics of a network coupled to a client computing device;

calculating a new HQRB based on the data throughput characteristics; and

encoding the enhancement layer bitstream based on the new HQRB to generate a transcoded enhancement layer for streaming to the client computing device; and

wherein the base layer is not decoded for streaming to the client computing device.

11. A computer-readable medium as recited in claim 10, wherein the computer-executable instructions for encoding substantially optimizes transcoded enhancement layer for streaming with the base layer across the network to the client computing device as compared to streaming of the encoded video data.

12. A computer-readable medium as recited in claim 10, wherein the encoded video data is encoded using progressive fine-granularity scalable (PFGS), MA-FGS, or RFGS encoding criteria.

13. A computer-readable medium as recited in claim 10, wherein the data throughput characteristics indicate a relatively low data throughput, and wherein the computer-executable instructions for calculating the new HRQB further comprise instructions for:

responsive to identifying the relatively low data throughput, selecting the new HRQB to be lower than the high HRQB.

14. A computer-readable medium as recited in claim 10, wherein the data throughput characteristics indicate a relatively high data throughput, and wherein the computer-executable instructions for calculating the new HRQB further comprise instructions, responsive to identifying the relatively high data throughput, for selecting the new HRQB to be the same or higher than the high HRQB.

15. A computer-readable medium as recited in claim 10, wherein the instructions for encoding further comprise instructions for determining motion vector(s) from the base layer without decoding an entirety of a bitstream corresponding to the base-layer.

16. A computer-readable medium as recited in claim 10, wherein the computer-executable instructions further comprise instructions for streaming the transcoded enhancement layer and the base layer across the network to the client computing device.

17. A computer-readable medium as recited in claim 10, wherein the computer-executable instructions further comprise instructions for encoding video data to generate the one or more enhancement layers and the base layer.

18. A computer-readable medium as recited in claim 10, wherein the computer-executable instructions further comprise instructions for determining networking and/or video presentation capabilities of the client computing device, and wherein calculating the new HQRB further comprises formulating the new HQRB based on one or more of the networking and/or video presentation capabilities.

19. A computing device comprising a processor coupled to a memory, a memory comprising computer-program instructions executable by the processor for:

decoding an enhancement layer bitstream from encoded video data, the encoded video data having a base layer and one or more enhancement layers, the video data having been encoded according to a high HQRB (high quality reference bit-rate);

determining data throughput characteristics of a network coupled to a client computing device;

calculating a new HQRB based on the data throughput characteristics; and

encoding the enhancement layer bitstream based on the new HQRB to generate a transcoded enhancement layer for streaming to the client computing device; and

wherein the base layer is not decoded for streaming to the client computing device.

20. A computing device as recited in claim 19, wherein the computer-executable instructions for encoding substantially optimizes transcoded enhancement layer for streaming with the base layer across the network to the client computing device as compared to streaming of the encoded video data.

21.   A computing device as recited in claim 19, wherein the encoded video data is encoded using progressive fine-granularity scalable (PFGS), MA-FGS, or RFGS encoding criteria.

22.   A computing device as recited in claim 19, wherein the data throughput characteristics indicate a relatively low data throughput, and wherein the computer-executable instructions for calculating the new HRQB further comprise instructions, responsive to identifying the relatively low data throughput, for selecting the new HRQB to be lower than the high HRQB.

23.   A computing device as recited in claim 19, wherein the data throughput characteristics indicate a relatively high data throughput, and wherein the computer-executable instructions for calculating the new HRQB further comprise instruction, responsive to identifying the relatively high data throughput, for selecting the new HRQB to be the same or higher than the high HRQB.

24.   A computing device as recited in claim 19, wherein the computer-executable instructions for encoding further comprise instructions for determining motion vector(s) from the base layer without decoding an entirety of a bitstream corresponding to the base-layer.

25.   A computing device as recited in claim 19, wherein the computer-executable instructions further comprise instructions for streaming the transcoded enhancement layer and the base layer across the network to the client computing device.

26.   A computing device as recited in claim 19, wherein the computer-executable instructions further comprise instructions for encoding video data to generate the one or more enhancement layers and the base layer.

27.   A computing device as recited in claim 19, wherein the computer-executable instructions further comprise instructions for determining networking and/or video presentation capabilities of the client computing device, and wherein calculating the new HQRB further comprises formulating the new HQRB based on one or more of the networking and/or video presentation capabilities.

28. A computing device comprising:

means for decoding an enhancement layer bitstream from encoded video data, the encoded video data having a base layer and one or more enhancement layers, the video data having been encoded according to a high HQRB (high quality reference bit-rate);

means for determining data throughput characteristics of a network coupled to a client computing device;

means for calculating a new HQRB based on the data throughput characteristics;

means for encoding the enhancement layer bitstream based on the new HQRB to generate a transcoded enhancement layer for streaming to the client computing device; and

wherein the base layer is not decoded for streaming to the client computing device.

29. A computing device as recited in claim 28, wherein the computer-executable instructions for encoding substantially optimizes transcoded enhancement layer for streaming with the base layer across the network to the client computing device as compared to streaming of the encoded video data.

30.   A computing device as recited in claim 28, wherein the encoded video data is encoded using progressive fine-granularity scalable (PFGS), MA-FGS, or RFGS encoding criteria.

31.   A computing device as recited in claim 28, wherein the data throughput characteristics indicate a relatively low data throughput, and wherein the means for calculating the new HRQB further comprise, responsive to identifying the relatively low data throughput, means for selecting the new HRQB to be lower than the high HRQB.

32.   A computing device as recited in claim 28, wherein the data throughput characteristics indicate a relatively high data throughput, and wherein the means for calculating the new HRQB further comprise, responsive to identifying the relatively high data throughput, means for selecting the new HRQB to be the same or higher than the high HRQB.

33.   A computing device as recited in claim 28, wherein the means for encoding determine motion vector(s) from the base layer without decoding an entirety of a bitstream corresponding to the base-layer.

34.   A computing device as recited in claim 28, further comprising means for encoding video data to generate the one or more enhancement layers and the base layer.

35. A computing device as recited in claim 28, wherein the computing device further comprises means for streaming the transcoded enhancement layer and the base layer across the network to the client computing device.

36. A computing device as recited in claim 28, wherein the computing device further comprises means for determining networking and/or video presentation capabilities of the client computing device, and wherein the means for calculating the new HQRB further comprises means for formulating the new HQRB based on one or more of the networking and/or video presentation capabilities.